

# START SMART. START CLEAN.

PROTECT YOUR EQUIPMENT WITH CLEAN DIESEL KITS.



### THE DIRT ON DIESEL.

**REGARDLESS OF HOW CLEAN YOUR BULK TANK IS, YOUR DIESEL IS DIRTY.** As it travels from the refinery to your tank, bulk diesel is transferred from one container to another numerous times – picking up dirt and water along the way. A typical 10,000-gallon bulk diesel delivery can carry as much as 1.5 pounds of dirt – enough to wreak havoc in your engine.

#### THE TINIEST PARTICLES CAN CAUSE BIG PROBLEMS.

High-pressure fuel injectors typically have a clearance size of less than 5 microns – that's smaller than a red blood cell. When your diesel is delivered, it can contain nearly 100 million 4-micron particles in ONE gallon.







Desired rating for diesel fuel before pumping into equipment. (ISO 14/13/11)

FUEL INJECTOR CLEARANCE	SIZE OF FAMILIAR PARTICLES		
2 – 5 Microns	Grain of table salt	100 μm	
	Human hair	80 µm	
	White blood cell	25 μm	
The typical clearance for a high pressure common rail fuel injector is less than 5 microns, and some injectors feature a clearance of less than 2 microns, so even the tiniest particles can cause problems.	Talcum powder	10 μm	•
	Red blood cell	8 µm	•
	Bacteria	2 µm	•
	Silt	< .5 µm	•

#### The damaging effects of dirty fuel.

Your machine's engine requires clean fuel in order to operate efficiently. Unfiltered diesel contains tiny particles that act like a sandblaster – gouging the injector and creating inefficient spray-patterns. This can cause:

- Improper idling
- Irregular fuel distribution
- Unsuitable exhaust emissions
- Poor fuel economy

In addition, dirty fuel causes your equipment's filters to work overtime – leading to clogged filters, unnecessary maintenance and increased downtime.

#### Dirty diesel means costly downtime.



Today's sophisticated diesel engines require cleaner fuel than ever before to operate efficiently, due to injection pressures of more than 30,000 PSI and extremely tight tolerances.

In engines where precision is everything, you can't risk the damage done by high-velocity contaminant. At 30,000 PSI, microscopic particles act like a tiny sandblaster, gouging the injector and creating inefficient spray-patterns.

A fouled injector doesn't spray fuel efficiently and can lead to improper idle, irregular fuel distribution, unsuitable exhaust emissions and poor fuel economy.



#### Keep it clean.

Our Clean Diesel Kits are designed to filter harmful, microscopic contaminants out of your fuel before they're pumped into your machines. Simple to install and easy to monitor, Clean Diesel Kits protect your engine and cut costs due to unexpected maintenance and downtime.

• Easy to install on any system

O-ring seal design for maximized efficiency and no leaks

 Spin-on design makes filter changes quick and easy

 Pressure gauge informs you when it's time to

change your filter

#### **Clean Diesel Kit Features and Benefits:**

- Protects diesel engines, reduces maintenance costs and prevents premature engine failure.
- Cleans fuel to meet ISO 14/13/11 rating for diesel.
- Recommended for all diesel and biodiesel blends.
- For flow rates up to 65 GPM / 246 LPM.

**EASY** 

TO USE





## CONTACT YOUR LOCAL NEW HOLLAND DEALER TODAY FOR MORE INFORMATION ABOUT CLEAN DIESEL KITS.

